

Official

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Serial No. 09/707,816
Docket No. NEC N00204
Amendment C under Rule 116

AMENDMENTS TO THE SPECIFICATION:

Please amend the paragraph bridging pages 31 and 32, beginning at page 31, line 18, as follows:

In addition, the reference voltage V_{LG} , the reference voltage V_{MG} and the reference voltage V_{HG} for applying the gamma compensation to the video green signal S_{GC} and the reference voltage V_{LB} , the reference voltage V_{MB} and the reference voltage V_{HB} for applying the gamma compensation to the video ~~green~~ blue signal S_{BC} are set so that an area from a minimum luminance (a minimum transmittance) to a maximum transmittance of a corresponding V-T characteristic can be fully used. In other words, for example, when the color liquid crystal display 1 has the V-T characteristic as shown in Fig. 22 (curve b), the reference voltage V_{LG} is set to ~~approximate~~ approximately 1.0V in order to obtain a maximum transmittance (a maximum luminance) instead of ~~approximate~~ approximately 1.7V of the conventional voltage, and when the color liquid crystal display 1 has a V-T characteristic as shown in Fig. 24 (curve b), the reference voltage V_{LG} is set to ~~approximate~~ approximately 1.8V in order to obtain a maximum transmittance (a maximum luminance, a peak point). Similarly, for example, when the color liquid crystal display 1 has a V-T characteristic ~~to~~ as shown in Fig. 22 (curve c), the reference voltage V_{LB} is set to ~~approximate~~ approximately 1.5V in order to obtain a maximum transmittance (a maximum luminance) instead of ~~approximate~~ approximately 1.7V of the conventional voltage, and when the color liquid crystal display 1 has a V-T characteristic ~~to~~ as shown in Fig. 24 (curve c), the reference voltage V_{LB} is set to

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ON approximate approximately 2.0V in order to obtain a maximum transmittance (a maximum luminance, a peak point).

Please amend the paragraph beginning at page 33, line 14, as follows:

C2 Similarly, for example, when a non-active control signal S_{C2} is supplied from the CPU (not shown), the common terminals Tc of switch 28₄ to switch 28₆ shown in Fig. 3 are connected to the first selection terminals Ta, therefore, the fixed reference voltage V_{LGF} , the fixed reference voltage V_{MGF} and the fixed reference voltage V_{HGF} supplied from the reference voltage supply source 26 are directly supplied to the gamma compensating circuit 21₂ shown in Fig. 1 as the reference voltage V_{LG} , the reference voltage V_{MG} and the reference voltage V_{HG} . With this operation, the gamma compensation including the first gamma compensation and the second gamma compensation is applied to the ~~video red signal S_{RC}~~ video green signal S_{GC} based on the reference voltage V_{LG} , the reference voltage V_{MG} and the reference voltage V_{HG} in the gamma compensating circuit 21₂ independently of the video red signal S_{RC} and the video blue signal S_{BC} , and thereby a gradient is given. Then, the video green signal S_{GC} is output as a video green signal S_{GO} .

Please amend the paragraph bridging pages 35 and 36, beginning at page 35, line 17, as follows:

Similarly, for example, when an active control signal S_{C2} and a reference voltage change data D_{RV} are supplied from the CPU (not shown), the DAC 25 converts the reference voltage change data D_{RV} into analog change voltage V_1 to analog change voltage V_9 and supplies them to respective input terminals of adder 27₁ to adder 27₉. With this operation, each

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of adder 27₄ to adder 27₆ adds each of the fixed reference voltage V_{LGF} , the fixed reference voltage V_{MGF} and the fixed reference voltage V_{HGF} supplied to the corresponding first input terminal to each of change voltage V_4 to change voltage V_6 supplied to the corresponding second input terminal and applies each of the addition result $(V_{LGF}+V_4)$, the addition result $(V_{MGF}+V_5)$ and the addition result $(V_{HGF}+V_6)$ to each of the second selection terminals T_b of switch 28₄ to switch 28₆. Further, since the common terminals T_c of switch 28₄ to switch 28₆ are connected to the second selection terminal T_b , the addition result $(V_{LGF}+V_4)$, the addition result $(V_{MGF}+V_5)$ and the addition result $(V_{HGF}+V_6)$ are supplied to the gamma compensating circuit 21₂ as the reference voltage V_{LG} , the reference voltage V_{MG} and the reference voltage V_{HG} . With this operation, the gamma compensation including the first gamma compensation and the second gamma compensation is applied to the video green signal S_{GC} in the gamma compensating circuit 21₂ based on the reference voltage V_{LG} , the reference voltage V_{MG} and the reference voltage V_{HG} which are finely adjusted in order to a change quantity (incline) of a voltage level of the ~~video red signal S_{RG}~~ video green signal S_{GC} to the reference voltage V_{LG} , the reference voltage V_{MG} and the reference voltage V_{HG} independently of the video red signal S_{RG} and the video blue signal S_{BC} , and thereby a gradient is given. Then, the video green signal S_{GC} is output as a video green signal S_{GQ} .

Please amend the paragraph beginning at page 43, line 5, as follows:

The MPX 46₁ switches a group of red gradation voltage V_{R0} to red gradation voltage V_{R8} over a group of red gradation voltage V_{R9} to red gradation voltage V_{R17} in red gradation voltage V_{R0} to red gradation voltage V_{R17} , supplied from the gradation power supply circuit 42

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based on the polarity inverting pulse POL supplied from the controlling circuit 41 and supplies any one of the groups to the DAC 47₁. Similarly, the MPX 46₂ switches a group of green gradation voltage V_{G0} to green gradation voltage V_{G8} over a group of ~~red~~ green gradation voltage V_{G9} to green ~~red~~ gradation voltage V_{G17} in ~~red~~ green gradation voltage V_{G0} to ~~red~~ green gradation voltage V_{G17}, supplied from the gradation power supply circuit 42 based on the polarity inverting pulse POL supplied from the controlling circuit 41 and supplies any one of the groups to the DAC 47₂. The MPX 46₃ switches a group of blue gradation voltage V_{B0} to blue gradation voltage V_{B8} over a group of blue gradation voltage V_{B9} to the blue gradation voltage V_{B17} in blue gradation voltage V_{B0} to blue gradation voltage V_{B17} supplied from the gradation power supply circuit 42 based on the polarity inverting pulse POL supplied from the controlling circuit 41 and supplies any one of the groups to the DAC 47₃.

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